

REMARKS

Reconsideration of the above identified application is respectfully requested.

Applicants yet again note the substantial breadth of interpretation of Applicants' claims being proffered by the examiner over the newly applied art, which correspondingly enlarges claim scope in later infringement analysis of the file wrapper. However, the examiner has again failed to afford due weight to specific features and cooperation of features which distinguish over the applied art.

Gas turbine engine art is quite esoteric and crowded, and requires corresponding appreciation of the specific problems being solved, and the solutions therefor in the context of those skilled in the art. See MPEP 2144.03 and In re Ahlert.

On February 26th, the undersigned attorney conducted a phone interview with the examiner to address these issues, and the examiner's allowance of claims 22 and 23, and the allowability of claims 12 and 13. No agreement was reached, except for the examiner's confirmation of the allowability of claims 12 and 13, and that the presently rejected independent claims should be allowed if amended to include the features introduced in claim 12.

Accordingly, solely in the interest of economy of prosecution, Applicants have chosen to provisionally amend independent claims 1 and 16-21 to include the features previously introduced in claim 12 for the express purpose of placing all claims in condition for allowance. Claim 12 has therefore been canceled, without prejudice, and claim 13 amended to depend from claim 6.

These amendments are provisional in the event the examiner does not allow all remaining claims; in which case it is requested that these amendments not be entered in accordance with the Advisory Action practice, and the claims

as previously presented will then be the subject of appeal to the Board of Appeals.

Applicants traverse the new rejection of claims 1, 2, 4, and 19 under Section 103(a) over Scheurlen and Chung et al.

The examiner has failed to meet the stringent requirements of MPEP 706.02(j), and has failed to meet the legal motivation requirements of MPEP ch. 2100.

The examiner attempts to combine the two disparate references Scheurlen and Chung in hindsight without regard to the differences thereof, and without regard to the specifically recited features of Applicants' claims.

Independent claims 1 and 19 recite, inter alia, a wall covered by TBC, and with specifically configured pores therein.

While Scheurlen discloses the heat insulator 2, Chung does not.

The examiner also admits that Scheurlen does not disclose "additional holes present," and attempts to use Chung for this omission without regard to the differences of these references.

The examiner's contention of "obvious ... to form ..." is not based on any legal motivation evidenced in the two references.

And, the examiner's combination of the two references is not relevant to the claims as recited.

It is noted at pages 3 and 4 of the office action that the examiner has expressly failed to afford any weight to the previously introduced features added to independent claims 1 and 16-21, and simply contends without any support in the MPEP or case law that such features fail to provide structural differences. This is clear error.

Independent claims 1 and 16-21 were previously amended to recite a pores as defined in the specification as clearly smaller than typical film cooling holes; a multitude of such pores as also defined in the specification based on minute

diameter size and close spacing in surface area in a substantially uniform pattern; and structurally and functionally introduced for effecting a reduction in average temperature of the TBC-wall interface.

The examiner has failed to provide any evidence in the two applied references to establish even a prima facie showing of obviousness; and admittedly fails to provide any weight to these specifically recited features.

In the phone interview, for example, the examiner cited Chung at figure 2 for the basis of "uniform" channels 20. Yet, this is clear error.

Figure 2 of Chung illustrates three rows of channels 20, which may have a uniform vertical spacing, but clearly not uniform horizontal spacing. Indeed, Figure 4 clearly illustrates that the channels 20 have quite different horizontal spacing around the exterior surface of the blade.

Nevertheless, duly recognizing the examiner's broad interpretation of the claims, independent claims 1 and 19 are being amended to also introduce the film cooling holes originally recited in claim 12.

In this way, the rejection of claims 1, 2, 4, and 19 should now be overcome, while maintaining the examiner's remarkably broad interpretation thereof, which broad interpretation should also apply to the film cooling holes now being added thereto.

Accordingly, withdrawal of the rejection of claims 1, 2, 4, and 19 under Section 103(a) over Scheurlen and Chung et al is warranted and is requested.

Applicants traverse the rejection of claims 5-11, 14-18, 20, and 21 under Section 103(a) over Scheurlen, Chung et al, and Bruce.

The examiner's expedient to merely reference the previous office action, when reference Chung was not previously applied is an ipso facto failure to comply with the stringent requirements of MPEP 706.02(j) and the legal

motivation requirements of MPEP ch. 2100.

This omnibus rejection must fail ab initio for this reason alone, as well as Applicants' previous rebuttal of the rejection based on Scheurlen and Bruce, which rebuttal has not been traversed by the examiner, but was apparently found persuasive.

And, yet again, the examiner has admittedly failed to afford any weight to the previous amendments to these claims; which introduced the same features in independent claims 16-18, 20, and 21 as were introduced in independent claims 1 and 19.

Now the examiner attempts to apply three disparate references, without any regard to the fundamental differences thereof, in a purely academic rejection without basis in those references themselves.

The examiner has admitted the fundamental shortcomings of Scheurlen, which shows substantially one-size bore 3 & 4, which bores are clearly not uniformly spaced apart.

The examiner applies Chung for uniform channels 20; yet clearly those channels are not uniformly spaced apart in two-dimensional surface area, nor do they cooperate with any TBC.

The examiner then applies Bruce, which shows singular holes 18 in the three figures, without regard to size or spacing of those singular holes.

It is quite clear that the examiner is using the three disparate references merely for their constituent parts, and without any regard to the whole teachings thereof, including the problems being solved.

The examiner then clearly uses Applicants' claims as the guide and selects from the disparate references only so much as the examiner believes is warranted in fabricating the rejection under Section 103, without regard to the remainder of these disparate references. This is classic hindsight reconstruction, and clear error.

As indicated previously, the gas turbine engine

component cooling art is quite esoteric and crowded, with the applied references being only three naked references in the plethora of references in this art.

This art contains reference after reference after reference ad infinitum, with apparently minor changes in forms of cooling apertures; yet to those skilled in the art such changes are quite significant, changes clearly overlooked by the examiner without due regard to the sophisticated art of record, and without regard to the knowledge of those skilled in the art.

Rejections in the USPTO cannot be merely academic; but must be made after due evaluation of the art and what would be known to those skilled in the art, and what might have been obvious to such skilled artisans. The MPEP in ch. 700 and 2100 is replete with guidelines, for which the examiner has clearly failed to afford due weight as evidenced by the cursory rejections, and express admissions of failure to afford any weight to certain claim features, without any support in the MPEP or applicable case law.

Yet again, Applicants have chosen to amend independent claims 16-18, 20, and 21, like independent claims 1 and 19, to introduce therein the film cooling holes of claim 12, which the examiner has indicated as allowable. These amendments are being made solely for economy of prosecution, and are provisional for acceptance by the examiner to place all claims in condition for allowance.

If the examiner does not allow all remaining claims based on the amendment thereof to include the features of claim 12, previously found allowable by the examiner, then the present amendments should not be entered, and the claims as last amended will be sent to appeal.

Accordingly, withdrawal of the omnibus rejection of claims 5-11, 14-18, 20, and 21 under Section 103(a) over Scheurlen, Chung et al, and Bruce is warranted and is requested.

Applicants note the allowance of claims 22 and 23, especially in view of the examiner's remarkably broad interpretation of the various features recited therein shown by the rejection of the other claims.

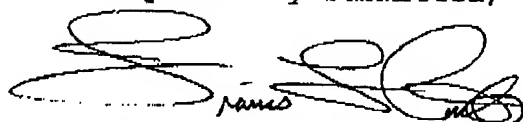
As indicated above, Applicants note the allowability of claims 12 and 13, with the features of claim 12 being added to independent claims 1 and 16-21; claim 12 being therefore canceled, without prejudice; and claim 13 being amended to depend from claim 6.

The examiner's response-to-arguments section found at pages 3 and 4 has been addressed above, including the examiner's admitted failure to afford any weight to the features previously added by amendment; and the examiner's failure to cite any support in the MPEP for the mere contentions found in the remarks.

Nevertheless, Applicants recognize the breadth of the examiner's interpretation of the claims as presently amended, which will therefore enjoy commensurately broad interpretation in any later infringement analysis of the file wrapper.

In view of the above remarks, allowance of all remaining claims 1-11 and 13-23 over the art of record is warranted and is requested.

Respectfully submitted,



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